

## ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

### **Instrument:**

*Tabla*, classical kettledrums for meditation

### **Country:**

India



### **Flag:**

The flag has three equal horizontal bands with saffron, a subdued orange, on the top, white in the middle, and green at the bottom. A blue *chakra* (shakra) or 24-spoked wheel is centered in the white band.



### **Size and Population:**

The country has an area of 179,744 square miles with 1,858,243 square miles of land surface and 196,500 square miles of water. India has 4375 miles of coastline and is slightly more than one-third the size of the US. The population of India is estimated at 1,065,070,607 as of July 2005; the second largest in the world behind China.

### **Geography and Climate:**

India's landscape contains great variety including a desert, tropical forests, lowlands, mighty rivers, fertile plains and the world's highest mountain ranges, the Himalayas. With the enormous wall of the Himalayas on the north, the triangular-shaped subcontinent of India borders the Bay of Bengal to the east, the Arabian Sea to the west, and the India Ocean to the south. From the Chinese border on the north, India extends 2000 miles to its southern tip, where the island nation of Sri Lanka is located. Going northeast of the Himalaya mountain range, India's borders constrict to a small channel that passes between Nepal, Tibet, Bangladesh, and Bhutan, then spreads out again to meet Burma in an area called the "eastern triangle." India's western border is with Pakistan.

India has three main land regions: the Himalaya, the Northern Plains, and the Deccan or Southern Plateau. The Himalaya curves for about 1,500 miles along the northern border of India

## ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

and can reach 200 miles wide. The Northern Plains lie between the Himalayas and the southern peninsula and have an average width of 200 miles. This area includes the important and sacred Ganges River that begins in the snow capped Himalayas. The soil in these plains is some of the most fertile in the world and is where most Indian people live. The Deccan is a huge plateau that forms most of the southern peninsula, and slants upward to the west where it meets the Western Ghats mountain range.

There are three seasons in India: cool, hot, and rainy. From October through February, the cool season brings snow in the mountains, but Southern India stays quite warm. During the hot season from June through September the northern plains can rise above 120° F. but the coastal plains stay around 85° F. The northern mountains are cool or cold depending on the altitude. The rainy season from June through September brings the monsoons, winds that pick up moisture over the ocean and deliver sometimes too much or too little rain for good crops. Some sloping regions get an average of 450 inches per year, while the desert gets only 2 inches annually.

### **Background and History:**

The history of India begins with the Indus River Valley civilization (now Pakistan and western India), one of the oldest civilizations in the world, as it dates back at least 4,500 years. Aryan tribes, a light skinned people, invaded this area from the northwest about 1500 B.C. and merged with the earlier inhabitants creating the classical northern Indian culture. They created the Sanskrit language and a way of writing it. The Dravidians, the existing dark-skinned people in India traded with the Aryans and advanced south to become the ancestors of present-day southern Indians. Based on the ancient Vedic texts, the religion of Hinduism began about the time of this early civilization. Later in India around 531 B.C., Siddhartha Gautama founded the religion of Buddhism, becoming the first Buddha.

In 325 B.C., Alexander the Great, a ruler from the area of Greece, conquered what is now northern India. These conquests linked areas of Europe and Egypt to India's northern Punjab region. The Golden Age of India also began around that time under the Gupta Dynasty, Indian rulers who unified the country and brought a rebirth of Hindu culture, beautiful cities and new universities. This era lasted from 320 B.C. to A.D. 500. In the south, another great civilization flourished and spread Indian culture into Southeast Asia.

Beginning around A.D. 700, Muslims invaded India from Arabia, Persia, and Afghanistan. In the early 1500s, Babar, a descendant of Genghis Khan invaded from central Asia, conquered much of northern India and established the Mogul Dynasty which lasted for almost 200 years. From the 11<sup>th</sup> to the 15<sup>th</sup> centuries, southern India was dominated by Hindu Dynasties. During this time, the two prevailing systems—Hindu and Muslim—mixed, leaving cultural influences on each other that have lasted until today.

Vasco da Gama, the Portuguese explorer reached India in 1498 and soon after established ports on India's western coast in order to control important sea routes. For hundreds of years India was a land of mystery and excitement to European travelers. The first British outpost in South Asia was established in 1619 on the northwestern coast of India in competition with the Portuguese. Later in the century, the British East India Company opened permanent trading stations at Madras, Bombay, and Calcutta. In 1857, a rebellion in north India caused the British Parliament

## ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

to transfer all political power from the East India Company to the British royal leadership in 1858. By the 19<sup>th</sup> century, Britain had assumed political control of virtually all of India, but this resulted in violent revolt against British rule.

Begun in the 1920s, the protest techniques of nonviolent resistance and non-cooperation with British colonialism practiced by Mahatma (mah-hat-mah) Gandhi and Jawaharlal (jah-wah-har-lal) Nehru led to India's independence from British rule in 1947. After independence, the Congress Party, the party of Gandhi and Nehru ruled India under the influence of Nehru, then his daughter Indira Gandhi and then his grandson Rajiv (rah-geef) Gandhi, with the exception of two brief periods in the 1970s and 1980s. Indian government in the 1990s brought gradual liberalizations, which in turn brought India into the global market place. Today, with New Delhi as the capital, the Republic of India, commonly known as India, has 28 states.

Fundamental social and political concerns in India include an ongoing dispute with Pakistan over Kashmir, massive overpopulation, environmental degradation, extensive poverty, and ethnic and religious strife—all this despite large gains in economic investment and output.

### **Culture:**

A wide variety of classical and folk arts in India began even before the first century A.D. Some of the oldest Buddhist monasteries and shrines demonstrate the oldest forms of Indian architecture. When the Muslims invaded India in the 8<sup>th</sup> century, they brought Islamic religion and art. While the Hindu religion allowed people to carve human figures like Buddha, the Muslims were forbidden carve such images by their teachings, so Muslims expressed their art by highly decorating their mosques—places of worship—and other buildings. An example of this is the Taj Mahal, the tomb of an Indian ruler built in the mid-1600s.

There are two main types of paintings in India: wall paintings and miniatures. Wall paintings, developed early by Buddhists, wrap around a room and often tell a story. Miniature paintings done on paper attained technical excellence for several centuries beginning around 1500. These miniatures depict India's ruling classes and Hindu legends.

There are over 16 major languages and 1000 minor languages in India, and each language has its own literature. Classical works in the ancient Sanskrit language date from around 1500 B.C. Of these works, the *Rig-Veda* (rig-veda) is the earliest collection of hymns ever made and the two epic poems, the *Ramayana* (rah-mah-yah-nah) written around 200 B.C., and *Mahabharata* (mah-hah-bah-rah-tah) written around 1200 B.C., are legendary. Recently, many Indian classics have been translated into English. The English language enjoys special status and it is the most important language for national, political, and commercial communication. Hindi is the national language and primary tongue of 30 percent of the people, but there are 14 other official languages.

There is great disparity in living conditions in India, in part due the ancient Hindu caste system. Though outlawed after independence in 1947, for over 2000 years Indian society was based on an individual's social level at birth. From highest to lowest were religious officials, rulers and warriors, farmers and merchants, and servants or peasants. As a result some people have great

wealth but many others still live in abject poverty. Some ways of life have stayed the same for hundreds of years, and existed side by side with modern civilization.

Religion is central to Indian culture, and its practice can be seen in virtually every aspect of life in the country. Hinduism is the dominant faith of India, serving about 81 percent of the population. Twelve percent are Islamic, and about 4.5 percent are Sikhs and Christians; the rest (around 45 million) are Buddhists, Jains, Bahais, and others. It is impossible to speak of any one Indian culture, although there are deep cultural continuities that tie its people together.

The music of India has legendary links to the origins of India itself including the Vedas, ancient scripts of the Hindus. The diversity of Indian music seems to have been a result of many cultures coming into contact and influencing each other. Vocal music, instrumental music and dance are the three art forms that make up *sangeet* (sang-geet), the foundation of Indian music. Today this music is based on *rag* (rog) or melodic scale and *tal* (tol) or timekeeping. Both *rag* and *tal* range from simple to very complex patterns and variations, and they vary in different parts of India. A basic distinction between *rag* and *tal* is in the artistic traditions of the north or *Hindustani sangeet* and the south or *Carnatic sangeet*. The main difference is in the way each is written and performed.

The focus of this chapter is on the North Indian tradition of the *tabla* (tah-blah), two kettledrums that combine Hindu and Muslim traditions. The *tabla* drums are considered classical instruments in North India and are associated with meditation because of the many modes of the culture's melodic scales and rhythms.

### **Music: Instruments and Rhythms**

**Instruments:** The *tabla* is a set of two small, pitched kettledrums. While they are the most common type of drums used today in the north, one also finds the *pakhawaj* (pah-kow-wudge), a barrel-shaped drum with two drumheads and a center paste on each head. The two drums of the *tabla* set consist of a tall wooden kettledrum on the right called *tabla dāyāñ* (die-yon) or "right *tabla*," and a shorter usually metal kettledrum on the left called *tabla bāyāñ* (bah-yon) or "left *tabla*." Both *tabla* drums have a small, circular black paste on the drumhead that adds to the characteristic definite pitch.

The drums are played with the fingers and palms of both hands, sometimes both on one drum, but mostly with the right hand on the *tabla dāyāñ* and the left hand on the *tabla bāyāñ*. The drums are carefully tuned by hitting drumhead's supporting hoop or wooden pegs with a hammer—down to tighten and up to loosen. The *tabla* drumheads have three basic parts for sound production: the main drumhead area or *maiden* (may-den), the *chat* (chot), the edge of the drumhead, and the *syahi* (see-yah-hee), a thin black paste located exactly at (*tabla dāyāñ*) or near (*tabla bāyāñ*) the center of the drumhead. The *syahi* provides extra weight to the drumhead and enables the drum to have a definite pitch. *Tabla* players use talcum powder to prevent sweat from building up on the drumhead, which can ruin the paste and thus the sound. Today, *tabla* drummers play sitting on the ground with the two drums positioned on round cloth-filled rings called *chutta* (chew-tah). Also varying sizes of *tabla dāyāñ* placed in a circle of 12-16 drums can be used to play melodies. This is called *tabla tarang*, or literally *tabla* "waves."

## ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

Other North Indian instruments include the strummed *sarod* (sar-ode), the struck *santur* (saun-toor) and the bowed *sarangi* (sar-ang-ghee). The most famous string instrument in northern India is the *sitar* (sih-tar), made world famous by Ravi Shankar in his association with the Beatles and George Harrison in the 1960s. Northern wind instruments include the *bansuri* (bon-sur-ee), a side-blown flute, the *shehnai* (sha-nigh), a double reed instrument, and the harmonium (har-moh-ne-um), a hand-pumped reed organ. Idiophones found in North India include *ghungharu* (gung-gar-ru), or angle bells and *manjira* (mon-jeh-rah) or *talas* (tol-is), small cymbals.

**Rhythms:** Timekeeping for the *tabla* is called *tal* or “clapping.” Handclapping along with waving the hands (like a “shoo-fly” motion) is the main way that young Indian musicians begin to keep time. For example, when keeping a 16-beat rhythm the pattern would be as follows:

Clap, 2, 3, 4, Clap, 6, 7, 8, Wave, 10, 11, 12, Clap, 14, 15, 16

There are three lengths of rhythm in North India. From short to long they are as follows: the beat, the measure and the cycle. The beat or *matra* (mah-trah) is the shortest type of rhythm and the same as in Western music, a steady pulse. The measure or *vibhag* (vih-bog), the medium length rhythm, is made up of various combinations of two, three, and four beats. A measure might have, for example, 7 beats counted, 1, 2, 1, 2, 1, 2, 3. Cycles or *avartan* (ah-var-ton) are the longest type of rhythm. For example, if a 7-beat measure is used, it will continue through that particular piece of music. Within the cycle, the first beat, called *sam* (sum) is very important. It is the place where all musicians come together in their music. It should also be noted that the rhythms of North Indian music are characteristically based on combinations of even and odd numbers that, while common to those who grow up around it, often sound extremely complex to listeners who are unfamiliar with the style.

Performers pronounce various strokes on the *tabla* as syllables, called *bols* (bowls). Each stroke has an assigned syllable and all rhythms use those syllables. It is therefore important to say the *bol* as you perform the sound and rhythm on the drums. While there are many types of *bols*, only a five will be used in this chapter. Some of the sounds on the *tabla* resonate while others do not. The sounds here will be the resonating type. We will use three basic *bols* and two combinations of these, totaling five *bols* as shown below.

The rhythms illustrated below are five of the basic types for the *tabla*: *Tal Tintal* (tol teen-tol) 16 beats, *Tal Jhaptal* (tol jep-tol) 10 beats, *Tal Dadra* (tol dah-drah) 6 beats, *Tal Dipchandi* (tol dipchon-dee) 14 beats, and *Tal Rupak* (tol ruh-pok) 7 beats.

### **Listen & Play Along:**

*Note to teachers: if instruments are not readily available, consider having students make their own (a general activity for making drums can be found in the Roots of Rhythm: Introduction Section, and a specific activity for making tabla is described below) or encourage them to improvise - using everyday items such as buckets, containers, phonebooks, desktops, etc., as instruments. Rhythms can also be created with body percussion including handclapping, foot tapping, finger snapping, etc.*

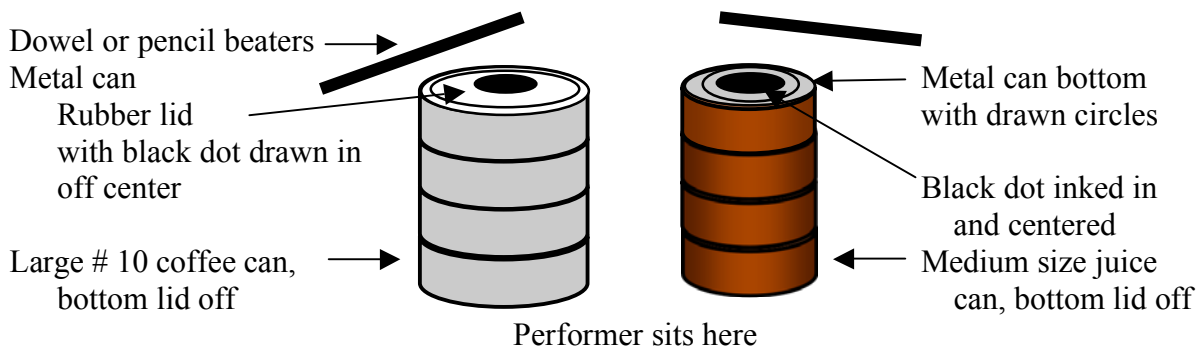


## ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

*Listen to Tracks 46-53 of the Roots of Rhythm Extensions Companion CD to hear the sound of the tabla and the tabla tarang or melody on drums. Now it is time to play the tabla. You can also use bongo drums or other percussion instruments to play along with music on the Roots of Rhythm Extensions Companion CD. Or, if you don't have these instruments, make your own substitutes (see activity below for making homemade tabla).*

*Listen to Tracks 54-58 of the Roots of Rhythm Extensions Companion CD and play along with the rhythms. To begin, just try to have fun! Now read the box notation in the Resources section that shows each of the various rhythms, and begin again with the count and drum syllables or bols. You could begin by counting the rhythm then clapping it with a wave for the silent count. Have someone else count and clap while you play the rhythm on the tabla. Move down the list of various rhythms in the same way.*

**Making Your Own Tabla:** Make your own set of *tabla* with two cans, the large “number ten” can and a medium juice can. For the *tabla bāyāñ*, use the rubber lid that comes with the can. For the *tabla dāyāñ* sound hit the metal bottom of the can with a dowel. *Safety Note: When you remove the bottom metal end be sure to flatten any sharp edges with a hammer or pliers.* You can hit the cans with either your fingers, with 10-inch long dowels (1/4 inch diameter), or new pencils (eraser end). Aim for the correct places on the cans that correspond to the *tabla* strokes shown below.



### **Tabla and Performer:**

#### **Tabla with tuning hammer and powder**



**Tabla in playing position - Front View**

Photographs by Craig Woodson.

#### **Abhiman Kaushal**



**Resources: The *Tabla* Playing Techniques and Rhythms**

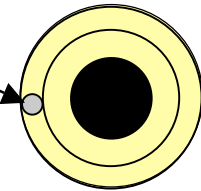
***Tabla* Playing Techniques**

There are three strokes and two combinations used in the five *tabla* rhythms shown below. The *tabla bāyāñ* has one stroke, the *ge* which is often used in combination with the two *tabla dāyāñ* strokes shown here. The five beginning strokes are as follows:

1. *Taa/Naa\** - right index finger hits a rim tone on the *chat* of the *tabla dāyāñ*  
*Taa/Naa* = R



Front View

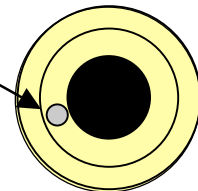


Performer's View

2. *Tin* - right hand index finger strikes the *tabla dāyāñ maidan* softly but with resonance. *Tin* = R



Front View



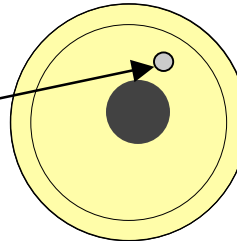
Performer's View

\* - The *naa* and *taa* are interchangeable terms and represent the same sound. All illustrations are shown from the audience's perspective.

3. *Ge* - left hand's middle finger strikes the *tabla bāyāñ* between *syahi* and *chat* on the *maidan*.  
*Ge* = L



Front View



Performer's View

***Combination strokes***

4. *Dhaa* - the right hand hits *Taa/Naa* and the left hand hits *Ge* at the same time.



5. *Dhin* - the right hand hits *Tin* and the left hand hits *Ge* at the same time.



# ROOTS OF RHYTHM: EXTENSIONS - CHAPTER 4: THE TABLA FROM INDIA

## Tabla Rhythms

### 1. *Tal Tintal* (16 beats 4+4+4+4)

Count	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Say	Dhaa	Dhin	Dhin	Dhaa	Dhaa	Dhin	Dhin	Dhaa	Naa	Tin	Tin	Taa	Taa	Dhin	Dhin	Dhaa
<i>Taa/Naa</i>	R			R	R			R	R			R	R			R
<i>Tin</i>		R	R			R	R			R	R			R	R	
<i>Ge</i>	L	L	L	L	L	L	L	L						L	L	L

### 2. *Tal Jhaptal* (10 beats 2+3+2+3)

Count	1	2	1	2	3	1	2	1	2	3
Say	Dhin	Naa	Dhin	Dhin	Naa	Tin	Naa	Dhin	Dhin	Naa
<i>Taa/Naa</i>		R			R		R			R
<i>Tin</i>	R		R	R		R		R	R	
<i>Ge</i>	L		L	L				L	L	

### 3. *Tal Dadra* (6 beats 3+3)

Count	1	2	3	1	2	3
Say	Dhaa	Dhin	Naa	Dhaa	Tin	Naa
<i>Taa/Naa</i>	R		R	R		R
<i>Tin</i>		R			R	
<i>Ge</i>	L	L		L		

### 4. *Tal Dipchandi* (14 beats 3+4+3+4)

Count	1	2	3	1	2	3	4	1	2	3	1	2	3	4
Say	Dhaa	Dhin		Dhaa	Dhaa	Tin		Taa	Tin		Dhaa	Dhaa	Dhin	
<i>Taa/Naa</i>	R			R	R			R			R	R		
<i>Tin</i>		R				R			R				R	
<i>Ge</i>	L	L		L	L						L	L	L	

### 5. *Tal Rupak* (7 beats 3+2+2)

Count	1	2	3	1	2	1	2
Say	Tin	Tin	Naa	Dhin	Naa	Dhin	Naa
<i>Taa/Naa</i>			R		R		R
<i>Tin</i>	R	R		R		R	
<i>Ge</i>				L		L	

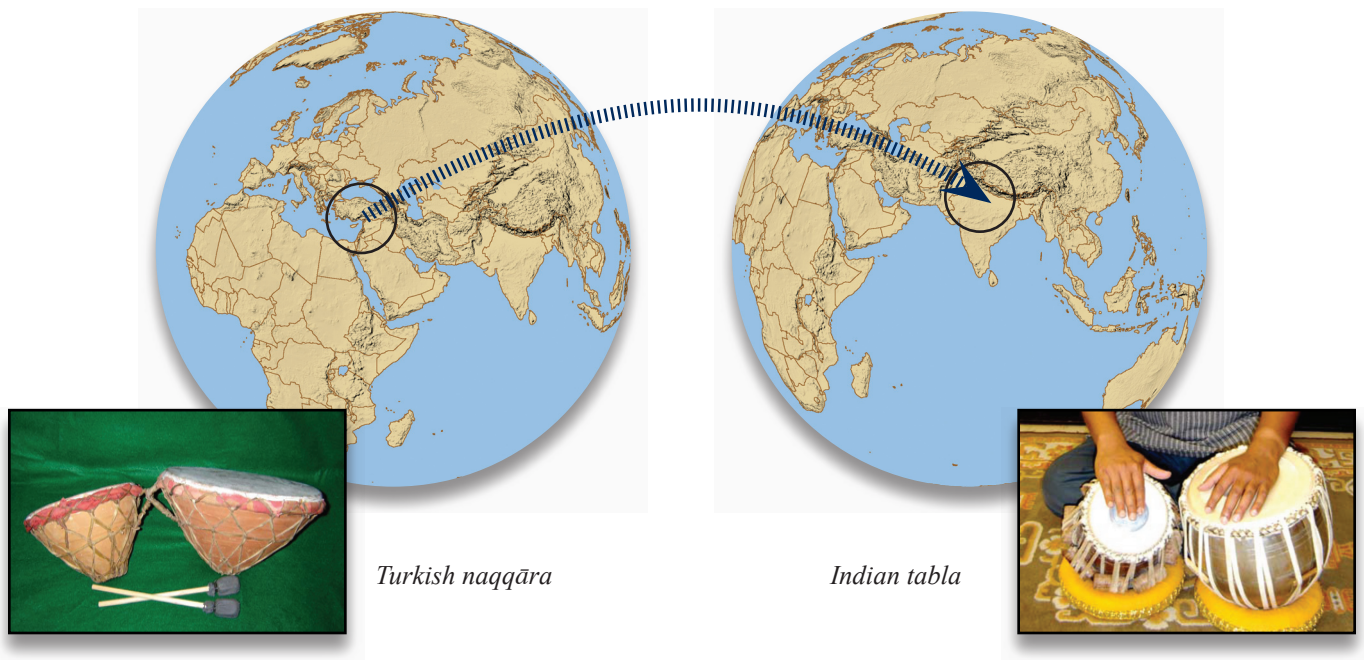


## ROOTS OF RHYTHM: EXTENSIONS • CHAPTER 4: THE *TABLA* FROM INDIA

### Extensions:

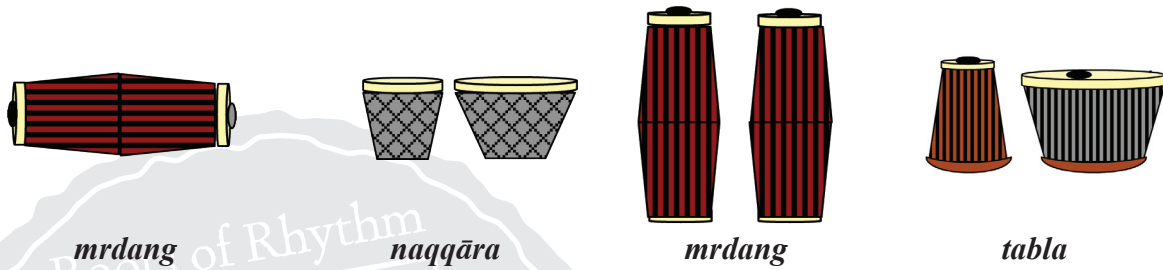
The *tabla* as we know it evolved over a period of around 250 years. While there are several stories about the origin of the *tabla*, the instrument probably comes from a combination of two different types of drums, the *pakhawaj* (*pah-kow-wudge*) common in northern India and Turkish military kettledrums called *nagada* or *naqqāra*. This transformation, which took place over hundreds of years, began around 1590. At that time the dominant Hindu drum was the *mrdang* (*mur-dung*), another name for the *pakhawaj*. It was a barrel-shaped drum with two drumheads of different pitches and a paste in the center of each drumhead that enhanced the tone. In this case, the drummer usually used the right hand to play a high sound on the right end of the drum and the left hand to play a low sound on the left end. It was usually played carried at waist level with a strap around the drummer's neck or played horizontally seated on the ground. This position dates back to sculptures that depict the technique around 900.

At some point, performers began to stand the *mrdang* on its end and play two drums but at one end only. This change is shown in sculptures and paintings from around 1590. Now, instead of playing on both ends of one drum, the drummer was playing on one end of two drums. The inspiration for playing the *mrdang* this way may have come from seeing Arabic performers play on the kettledrums brought to India by the Turkish invasions of Babar (also called Babur) between 1523-1530. Babar seized the major city of Delhi in 1526 and by his death in 1530 controlled most of India, establishing the Mughal (Mongol) dynasty in the area of India. It appears that over these important decades, drummers were changing the way that they were playing the drums and inventing new drums in the process. These drums became the *tabla*. Further proof of the Turkish/Arabian influence comes from the fact that the word “tabla” in Arabic means drum in the general sense.



*Beginning around 1590, the ancient and traditional Indian drum, the mrdang, as well as Indian drummers were influenced by naqqāra drums that were used by invading armies from Turkey and Arabia—becoming the tabla drums over more than 250 years of changes and musical evolution.*

### The Three Major Periods of *Tabla* Development



***mrdang***  
— 900 A.D.  
The wooden or clay *mrdang* is played horizontally with both hands by one drummer.

***naqqāra***  
1580-1590 A.D.  
The metal *naqqāra* are played with beaters and the *mrdang* is placed on its end and played in pairs.

***tabla***  
1772 A.D. —  
The first *tabla* appear as small kettledrums sitting on a cushion with a black paste on the drumhead.

Also, in the 1500s, Turkish military or Janissary bands brought Middle Eastern *naqqāra* rhythms like *ayub* in eight counts and *karsilama* in nine counts and these were combined with North Indian rhythms played on the *mrdang*. It is from these early rhythms and those of other countries like Iran (Persia) that a complex system of *tabla* counting and performance was developed.

Musical Influences		
	<i>Naqqara/Turkey</i>	<i>Tabla/India</i>
	Root	Influence → Extension
<b>Design</b>		kettledrum pairs (high/low) drumhead with rope tension
<b>Rhythms</b>		simple-to-complex
<b>Construction</b>	clay and metal	wood and metal paste on drumhead
<b>Technique</b>	mallets	fingers/hands
<b>Application</b>	military	meditation

While it is clear that the *tabla* were directly influenced by the *naqqāra*, the *tabla* can also be considered indirect extensions of other percussion instruments due to their similarities in one or more of several Extensions areas.

#### • Design/Construction Materials and Methods

The *tabla dāyāñ* is made from a hollowed out log but the *tabla bāyāñ* is made from a metal bowl. Both drums incorporate an animal skin drumhead that is tensioned using a rope and wooden tuning peg system, which makes them a part of the very large family of single-headed, tunable membranophones. These designs, materials and construction methods are among the most common throughout the drumming world and therefore do not necessarily indicate a direct influence from another culture or drumming style.

## ROOTS OF RHYTHM: EXTENSIONS • CHAPTER 4: THE *TABLA* FROM INDIA

It is also interesting to note that the *tabla* and the *naqqāra* both utilize the kettledrum design which is open at the top of the drum and closed at the bottom. This type of container reflects the sound waves back to the drumhead, reducing the lowest vibrations and increasing the highest vibrations. The reflections allow the tone to sustain longer, giving the kettledrum its long, characteristic tones. One example of this is the orchestral timpani with its large kettle and thin drumhead. The timpani are considered an European extension of the Middle Eastern *naqqāra*.

### • Playing Techniques

Similar to the *tabla*, ROR instruments such as the *bongos* and *djembés* are played with the fingers and hands. However, neither *bongos* or *djembés* require the same levels of digital dexterity as the *tabla*. *Tabla* technique is much closer to that of the frame drum and *doumbek* or *darabouka*; playing styles that may have also migrated to India from the Middle East over the centuries.

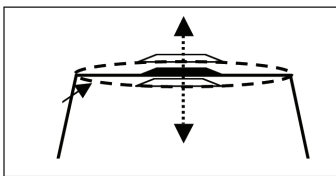
### • Quality or Type of Sound

Because of the *tabla*'s ability to produce both fixed and variable pitches, it bears two important similarities with the *dondo*, an hourglass shaped “squeeze” drum from Ghana, West Africa, and the *khōng wong yai* (kong wong yai), which is a set of tuned gongs, suspended on a frame, played with mallets and used in the *ranāt ēk* court ensemble from Thailand.

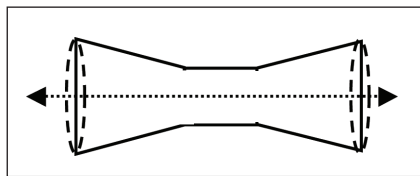
First, the *tabla* is similar to the *dondo* in that both drums have a musical pitch. For the *tabla*, pitch comes from the circular black paste that adds weight or a “load” to the drumhead in order to focus the head's vibration. The pitch of the *dondo* comes from the hourglass shape of the body of the drum. The air in the narrow middle of the drum speeds up when one head is struck and this helps the drumhead vibrate to create a definite pitch.

The “load” in the center of the *tabla* heads is also like the dome or “boss” on the top of the *khōng wong yai* that gives the gongs their musical pitch. In musical acoustics, the dome and black paste are called a “load” since they add weight to the drumhead, slow its vibration and focus its pitch.

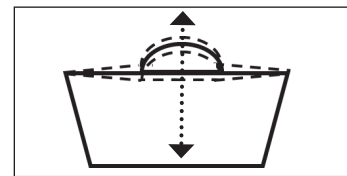
*Tabla's weighted paste gives it pitch*



*Dondo's hourglass shape gives it pitch*



*Khōng wong yai's raised dome gives it pitch*

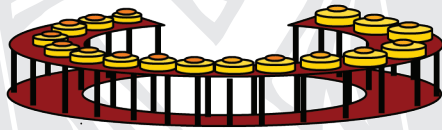


Second, the left *tabla* drum of the set, or *tabla bāyāñ*, can be played with a glissando effect, that is, changing the pitch of the drumhead during the performance. The pitch changes when the *tabla* drummer presses the heel of the left hand down on the drumhead as he or she is playing. In this way the *tabla* drummer can actually play a melody. The same effect is possible on the *dondo* by squeezing the cords connecting the two drumheads to tighten them. The performer squeezes the cords connecting the two drumheads, instantly tightening the skin. When the cords are relaxed the skin is loosened. The tight skin gives a high pitch and the loose skin gives a low one. In both types of drums there are many pitches in between high and low that can be played.

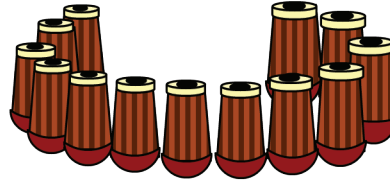
## ROOTS OF RHYTHM: EXTENSIONS • CHAPTER 4: THE *TABLA* FROM INDIA

The *tabla tarang* version of *tabla* playing can be considered another extension of the *khōng wong yai*. Like the *khōng wong yai*, the *tabla tarang* is a set of from 12 to 16 *tabla dāyāñs* placed in a semi-circular position for playing melodies. Both instruments have about the same number of notes and the pitches; all going from low on the performer's left to high on the performer's right. Yet although the *tabla tarang* and the *khōng wong yai* are both used to play melodies, they are made from different materials and thus have contrasting tonal qualities or timbres.

Roots of Rhythm  
*Khōng wong yai*



*Tabla Tarang*



### • Musical Style or Application

As direct extensions of the *naqqāra*, the *tabla* have specific connections to the instruments of the Middle East. These connections show how the *tabla* expanded the rhythms and technology of drumming as the instrument became used for meditation in North Indian culture. Similarities to other percussion instruments such as the *bongos*, *dondo* and the *khōng wong yai*, offer examples of how drumming is common to many world cultures, including those of Asia, Africa and North and South America.